

CLAIMS

What is claimed is:

1. A cargo distribution management system for allowing a server computer 1 to manage a cargo group 51, which is one of
5 or both of a loaded cargo 53 which is a pallet 55 loaded with a cargo 531 and the pallet 55 unloaded with the cargo 531 and contains into a container 52, and distributing the cargo group 51 between distribution points 2 including a consignor 21, a vanning center 22, a devanning center 25, and a consignee 26,
10 wherein

each of the distribution points 2 comprises a terminal 7, the terminal 7 comprising a distribution status transmission means 101 for transmitting distribution status information including at least identification information for individually
15 identifying the cargo group 51 and position information on the distribution point 2, to the server computer 1 and

the server computer 1 comprises:

a storage means 102 that constitutes a database storing the identification information and the distribution
20 status information;

a distribution status instruct means 103 for instructing the storage means 102 to store the received identification information and the distribution status information, and thereby instructing the storage means 102 to
25 update the distribution status information stored in the storage means 102; and

a distribution status output means 104 for outputting a result obtained by processing the distribution status information stored in the storage means 102.

2. The cargo distribution management system according to claim 1, wherein

said identification information further includes container packing information which includes at least a volume and a containing position of said cargo group 51 in said container 52,

said server computer 1 further comprises a container packing information generation means 108 for generating the container packing information so that a gross weight and a position of a center of gravity of the container 52 which contains the cargo group 51 fall within respective predetermined ranges, and

said one of or both of said loaded cargo 53 and said container 52 comprise an identification information storage medium 54 which stores said identification information.

3. The cargo distribution management system according to claim 2, wherein

said identification information storage medium 54 is a two-dimensional barcode.

4. The cargo distribution management system according to claim 2, wherein

said server computer 1 further comprises a procedural document creation means 107 for creating a procedural document necessary for distribution based on said distribution status information stored in said storage means 102.

5. The cargo distribution management system according to claim 2, wherein

said server computer 1 further comprises:

a distribution period calculation means 112 for calculating a distribution period of said cargo group 51 between said

distribution points 2;

a stock calculation means 109 for calculating stock information of said cargo 531 based on said distribution status information stored in said storage means 102, and for outputting
5 the calculated stock information; and

a stock planning means 110 for creating a plan of supplying the cargo 531 to the consignee 26 based on the stock information obtained by the stock calculation means 109 and said distribution period obtained by said distribution period calculation means
10 112 so that a stock quantity of said consignee 26 becomes constant, and wherein

said distribution period calculation means obtains a distribution processing period for each predetermined distribution processing element, and calculates a sum of
15 distribution processing periods as the distribution period.

6. The cargo distribution management system according to claim 2, wherein

said server computer 1 further comprises a reference
20 information transmission means 113 for transmitting one of or both of said distribution status information stored in said storage means 102 and an output result of the distribution status output means 104 to a reference terminal 7 connected to a communication network 6 in accordance with a reference request
25 signal transmitted from the reference terminal 7, and

said reference information transmission means 113 determines a reference right of said reference terminal, and restricting a range in which said distribution status information can be referred to in accordance with a result of the determination.

7. The cargo distribution management system according to claim 2, wherein

said server computer 1 further comprises:

a pallet information storage means 121 for storing pallet
5 information including a use history and a present position of
said pallet 55;

a pallet information update means 122 for updating the
pallet information stored in the pallet information storage means
121 based on said distribution status information output from
10 said distribution status output means 104; and

a pallet supply means 106 for issuing an instruction to
supply an empty pallet 552 that is said pallet 55 which is unloaded
from one of said distribution points 2 which has the empty pallet
552 to one of the distribution points 2 which needs the empty
15 pallet 552 while referring to said pallet information stored
in said pallet information storage means 121.

8. The cargo distribution management system according to claim
2, comprising a pallet use fee charging means 124 for calculating
and charging a use fee for using said pallet 55 based on said
20 distribution status information output from said distribution
status output means 104.

9. The cargo distribution management system according to claim
2, wherein

said identification information storage medium 54 includes
25 cargo details information of said loaded cargo 531.

10. The cargo distribution management system according to any
one of claims 3 to 9, wherein

a transport path of said cargo includes a container ship
transport path.

11. The cargo distribution management system according to claim 10, wherein

said cargo is a heavy article.

5 12. A consignor-side cargo distribution management system used for allowing a server computer 1 to manage a cargo group 51, which is one of or both of a loaded cargo 53 which is a pallet 55 loaded with cargo 531 and the pallet 55 unloaded with the cargo 531 and contains into a container 52, and distributing
10 the cargo group 51 between distribution points 2 including a consignor 21, a vanishing center 22, a devanning center 25 of an export destination, and a consignee 26, wherein

the server computer 1 comprises:

a storage means 102 constituting a database, for storing
15 identification information for individually identifying the cargo group 51 and distribution status information including at least position information on the distribution points 2;

a distribution status instruct means 103 for instructing the storage means 102 to store the received identification
20 information and the distribution status information, and thereby instructing the storage means 102 to update the distribution status information stored in the storage means 102; and

a distribution status output means 104 for outputting a result obtained by processing the distribution status information
25 stored in the storage means 102.

13. A consignee-side cargo distribution management system used for allowing a server computer 1 to manage a cargo group 51, which is one of or both of a loaded cargo 53 which is a pallet

55 loaded with cargo 531 and the pallet 55 unloaded with the cargo 531 and contains into a container 52, and distributing the cargo group 51 between distribution points 2 including a devanning center 25, a consignee 26, and a consignor 21 which
5 imports the cargo to the consignee 26, and a vaning center 22, wherein

the server computer 1 comprises:

a storage means 102 constituting a database, for storing identification information for individually identifying the
10 cargo group 51 and distribution status information including at least position information on the distribution points 2;

a distribution status instruct means 103 for instructing the storage means 102 to store the received identification information and the distribution status information, and thereby
15 instructing the storage means 102 to update the distribution status information stored in the storage means 102; and

a distribution status output means 104 for outputting a result obtained by processing the distribution status information stored in the storage means 102.

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14. A pallet management system for allowing a server computer 1 to manage a pallet 55 used to distribute a cargo 531 between distribution points 2 including a consignor 21 and a consignee 26, wherein

25 said server computer 1 comprises:

a pallet information storage means 121 for storing pallet information including a use history and a present position of the pallet 55;

a pallet information update means 122 for updating the

pallet information stored in the pallet information storage means 121;

a pallet supply means 106 for issuing an instruction to supply an empty pallet 552 that is said pallet 55 which is unused and which is unloaded with the cargo 531 from one of said distribution points 2 which has the empty pallet 552 to one of the distribution points 2 which needs the pallet 552 while referring to said pallet information stored in said pallet information storage means 121; and

a pallet use fee charging means 124 for calculating and charging a use fee for using said pallet 552 based on said pallet information stored in said pallet information storage means 121.

15. A computer readable recording medium storing a program for allowing a computer to operate as the cargo distribution management system according to any one of claims 1, 12 and 13.

16. A computer readable recording medium storing a program for allowing a computer to operate as the pallet management system according to claim 14.

17. A program for allowing a computer to operate as the cargo distribution management system according to any one of claims 1, 12, and 13.

18. A program for allowing a computer to operate as the cargo distribution management system according to claim 14.

19. A cargo distribution management system for allowing a server computer 1 to manage a cargo group 51 including the cargo 531 and contains into a container 52, and distributing the cargo group 51 between distribution points 2 including a consignor

21, a vanning center 22, a devanning center 25, and a consignee 26, wherein

each of the distribution points 2 comprises a terminal 7, the terminal 7 comprising a distribution status transmission means 101 for transmitting distribution status information including at least identification information for individually identifying the cargo group 51 and position information on the distribution point 2, to the server computer 1 and

the server computer 1 comprises:

10 a storage means 102 that constitutes a database storing the identification information and the distribution status information;

a distribution status instruct means 103 for instructing the storage means 102 to store the received
15 identification information and the distribution status information, and thereby instructing the storage means 102 to update the distribution status information stored in the storage means 102;

a distribution status output means 104 for outputting
20 a result obtained by processing the distribution status information stored in the storage means 102; and

a distribution period calculation means 112 for calculating a distribution period of said cargo group 51 between said distribution points 2, and wherein

25 said distribution period calculation means obtains a distribution processing period for each predetermined distribution processing element, and calculates a sum of distribution processing periods as the distribution period.

20. The cargo distribution management system according to claim 19, wherein

said server computer 1 further comprises:

5 a stock calculation means 109 for calculating stock information of said cargo 531 based on said distribution status information stored in said storage means 102, and for outputting the calculated stock information; and

10 a stock planning means 110 for creating a plan of supplying the cargo 531 to the consignee 26 based on the stock information obtained by the stock calculation means 109 and said distribution period obtained by said distribution period calculation means 112 so that a stock quantity of said consignee 26 becomes constant.

21. A consignor-side cargo distribution management system used
15 for allowing a server computer 1 to manage a cargo group 51 including cargo 531 and contains into a container 52, and distributing the cargo group 51 between distribution points 2 including a consignor 21, a vanning center 22, a devanning center 25 of an export destination, and a consignee 26, wherein

20 the server computer 1 comprises:

a storage means 102 constituting a database, for storing identification information for individually identifying the cargo group 51 and distribution status information including at least position information on the distribution points 2;

25 a distribution status instruct means 103 for instructing the storage means 102 to store the received identification information and the distribution status information, and thereby instructing the storage means 102 to update the distribution status information stored in the storage

means 102;

a distribution status output means 104 for outputting a result obtained by processing the distribution status information stored in the storage means 102; and

5 a distribution period calculation means 112 for calculating a distribution period of said cargo group 51 between said distribution points 2.

22. A consignee-side cargo distribution management system for
10 allowing a server computer 1 to manage a cargo group 51 including the cargo 531 and contains into a container 52, and distributing the cargo group 51 between distribution points 2 including a devanning center 25, a consignee 26, and a consignor 21 which imports the cargo to the consignee 26, and a vanning center 22,
15 wherein

the server computer 1 comprises:

a storage means 102 constituting a database, for storing identification information for individually identifying the cargo group 51 and distribution status information including
20 at least position information on the distribution points 2;

a distribution status instruct means 103 for instructing the storage means 102 to store the received identification information and the distribution status information, and thereby instructing the storage means 102 to update the distribution
25 status information stored in the storage means 102;

a distribution status output means 104 for outputting a result obtained by processing the distribution status information stored in the storage means 102; and

a distribution period calculation means 112 for calculating

a distribution period of said cargo group 51 between said distribution points 2.

23. A computer readable recording medium storing a program for allowing a computer to operate as the cargo distribution management system according to any one of claims 19, 21 and 22.

24. A program for allowing a computer to operate as the cargo distribution management system according to any one of claims 19, 21, and 22.